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MID-WINTER EROSION CONTROL WORK

A radio talk by Mr. E. J. Utz, Head, Section of Erosion Control Practices, Soil Conservation Service, delivered during the Department of Agriculture period of the National Farm and Home Hour, Wednesday, January 19, 1938, and broadcast by the National Broadcasting Company and a network of 93 associated radio stations.

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Saving the soil has become one of the prime elements in the thinking of American farmers. In the past few years, they have seen the disastrous effects of erosion by wind or water. They have seen practical demonstrations of erosion control carried on by 50,000 landowners cooperating with the Soil Conservation Service. They have taken part in Agricultural Conservation Programs which give some financial assistance to those who follow soil-saving methods.

Now getting down to that report -- In the light of these facts, I'm sure you will not be surprised to learn that this winter, more than ever before, farmers are planning or carrying on work which will help save the soil. In those states where the ground is frozen hard as pavement, farmers cooperating with the Soil Conservation Service have little chance these days for work in their fields or pastures. But indoors many of these farmers are now making ready for spring planting and other 1938 operations. You'll find them figuring out which fields to strip crop, where to grow cover crops, how to check active gullies, and so on.

Some of these farmers have been cooperating in the erosion control program for three years now, and they know the value of being prepared. They know that before many weeks have passed, snow will be melting and the ground softening up. They know that heavy spring and summer rains can cause erosion and wash out seed, thus reducing crop yields. Preparedness against erosion is a matter of dollars and cents to these farmers. This spring, the fields of nearly every farmer cooperating with the Service will be protected against erosion.

As I have said, winter is a difficult season for field work in many northern states. Frozen ground and drifting snow keep a lot of farmers close to their fireside these wintry days. But those who have woodlands are often busy cutting timber for fuel or cordwood. In approaching this seasonal job, the men cooperating with the Soil Conservation Service are thinking of the future value of these wooded areas, as well as present income. They know that a well managed woodland can provide a permanent income and an effective means of erosion control. So, they're not cutting young and vigorous trees that still have many years of life and growth. Instead, they're taking out the dead and injured specimens first. Then they're removing the less desirable and inferior trees for harvest. As you can readily understand, this leaves more room and food for the healthy trees to grow and reproduce. In short, northern farmers cooperating with the Soil Conservation Service are getting their winter supply of firewood, improving the value of their woodlands, and cutting down soil loss, all in one operation.

Now I want to report on that section of the country lying a little

(over)

farther south. This takes in the corn and winter wheat belts, the great interior valleys of California, and the territory west of the Cascades in Oregon and Washington. In all these places, winter is less severe, and farmers have a greater opportunity for field work. On the other side of the picture, these farmers are more likely to be bothered by soil washing through the winter because of ground thaws and periodic rains.

Those who now have an erosion control program are making a point these days of inspecting structures for evidence of present or future damage. Where field work is possible, they're clearing debris from the channels of terraces and diversion ditches to insure the proper discharge of water. They're filling up low places on terraced fields to prevent the water from collecting and breaking through the terrace ridges. They're watching new dams and other concrete or masonry structures to detect any shrinkage away from the wing walls that would leave a space for water to penetrate and cut around the structure. They're also repairing gully control structures, terrace outlet channels, and farm ponds.

When the ground is free of snow, farmers of this central belt are also busy putting their pastures in shape for spring. They're clearing away brush, stones, and other debris to give the grass a better chance for progress when the growing season begins. Applications of lime are helping to counteract soil acidity and tone up the quality of many pasture areas. In some sections, farmers are plowing pasture contour furrows to insure an adequate supply of moisture in the soil next summer and fall. All this work is increasing the value of pastures, both for forage production and for erosion control.

Now let's consider southern states and the far southwest. Here the weather permits soil-conserving farmers to carry on a wide variety of erosion control operations. In those sections to the eastward where January and February are months of heavy rainfall, a great many trees and vines are now being planted in gullies and other badly eroded areas. Fences are being erected to keep livestock out of young erosion control plantings and to divide fields more nearly on the contour. Where the ground can be easily worked, some of these farmers are building terrace systems and diversion ditches. In all parts of the cotton belt they are doing repair work on terrace channels, ditches and ponds, just like farmers in sections to the north.

Over the country as a whole, winter is an excellent period for planning. As most of you know, farmers everywhere are now busy figuring out their spring cropping systems and getting in their seed supplies. From all indications, this year will see a wider use of soil-conserving rotations. By that I mean rotations which include a frequent use of close-growing crops for hay or pasture. Such crops fit readily into the farm management scheme, and are especially valuable for saving soil and water.

In some parts of the country, you may see farmers these days surveying their fields and staking out contour lines across the slopes. These men are getting ready for contour farming in 1938. In simplest terms, contour farming means plowing, planting, cultivating, and harvesting on the true level across the slope. It may involve a bit of curving here and there, but farmers are finding it easier to pull equipment across the hill than to run it up and down. What is perhaps more important--almost everything done on

the contour helps to cut down soil washing. Every tooth mark, every harrow scratch lying across the slope serves as a kind of tiny dam to slow down runoff and promote its absorption by the soil. Largely because of this extra moisture, row crops planted on the contour last year made a generally better showing at harvest time than those planted up and down the slope.

Where the topography is rough or rolling, many farmers are seeking further protection these days by planning to lay out their row crops on the contour in long, relatively narrow strips. Above and below these strips they'll plant bands of hay or small grains, also across the slope. With this type of layout, the strips of close-growing crops protect the land used for clean-tilled crops, and very little water runs away as waste. This practice is known as strip cropping. Two types of crops are combined in a single broad field instead of dividing the area into a cultivated field and an adjoining meadow. As a result, the protection of the hay crop is extended over a larger area.

I have described briefly three measures now being included in soil-saving plans for the coming season: strip cropping, contour farming, and soil-conserving rotations. Time does not permit a discussion of the many other practices which are also being included. However, I hope these three may serve to indicate the trend on thousands of American farms, where erosion is now being recognized as a serious agricultural problem.

In addition to farm management plans and actual work on the land, farmers in many states are also working toward the establishment of soil conservation districts. According to reports coming to the Soil Conservation Service, they have now formed 14 districts in 7 states. State soil conservation committees continue to hold public hearings, and other districts are in the process of formation. As most of you know, 22 states passed soil conservation districts laws last year. These laws permit farmers to organize soil conservation districts on a voluntary basis. They offer a cooperative and democratic approach toward the solution of community soil erosion and flood problems.

I'd like to discuss the progress of these districts in some detail, but I believe we'd better put that off until we have a little more time, and a little more information. In a few weeks we'll be back with a more complete report as to just how farmers are progressing in the organization of soil conservation districts.

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